Amendments to the Claims:

1. (Currently Amended) A system for analyzing ECG curvature, the system comprising:

input means; and

an ECG source,

wherein the system is configured to isolate and store at least one among a number of different parameters,

wherein the input means is connected to the ECG source,

wherein the system is configured to indicate and/or isolate different parameters of a received ECG curvature to indicate symptoms,

wherein the system is configured to combine, in at least a first mathematical analysis, a ~~first number~~ a plurality of selected parameters from a number of groups of parameters including symmetry, flatness, duration and/or complexity,

wherein the system is configured to represent a result of the analysis as a point in at least one coordinate system having at least one axis,

wherein the system is configured to compare actual coordinates in the coordinate system with a number of reference parameters stored in the system, to indicate symptoms or diseases having influence on the ECG curvature,

wherein the system is configured to analyze a QT curvature of the ECG to indicate hereditary or acquired Long QT Syndrome.

2. (Previously Presented) A system for analyzing ECG curvature according to claim 1 wherein the system is configured to analyze the ECG curvature for Long QT Syndrome acquired by drug influence.

3. (Previously Presented) System according to claim 1, wherein the system is configured to repeat the analysis of the QT curvature for further selected parameters in order to achieve more reliable results.

4. (Previously Presented) System according to claim 1, wherein the group of symmetry comprises at least one of the following parameters:

S1 Symmetry evaluated from Tstart to Tend;

S2 Symmetry with Tpeak as mean evaluated from Tstart to Ten;

S3 Symmetry with Tpeak as mean evaluated in a symmetric interval of 10% of the Tstart-Tend-interval surrounding Tpeak;

S4 Symmetry with Tpeak as mean evaluated in a symmetric interval of 20% of the Tstart-Tend-interval surrounding Tpeak;

S5 Ratio of the time interval "Tstart to Tpeak" and the time interval "Tpeak to Tend;

S6 Ratio of the average slope from Tstart to Tpeak and from Tpeak to Tend;

S7 Variation evaluated from Tstart to Tend, calculated by the formula;

S8 Variation with Tpeak as mean evaluated from Tstart to Tend;

S9 Variation with Tpeak as mean evaluated in a symmetric interval of 10% of the Tstart-Tend-interval surrounding Tpeak;

S10 Variation with Tpeak as mean evaluated in a symmetric interval of 20% of the Tstart-Tend-interval surrounding Tpeak;

S11 The Hill parameter, K_m, evaluated by least square fitting of the repolarization integral, RI(t), from the Jpoint to the following Ponset; and

S12 The Hill parameter, K_m, evaluated by least square fitting of the repolarization integral, RI(t), from Tstart to Tend.

5. (Previously Presented) System according to claim 1, wherein the group of flatness comprises at least one of the following parameters:

F1 Flatness evaluated from Tstart to Tend;

F2 Flatness parameter, F1, normalized by the size of the R wave;

F3 Flatness with Tpeak as mean evaluated from Tstart to Tend;

F4 Flatness parameter, F3, normalized by the size of the R wave;

F5 Flatness with Tpeak as mean evaluated in a symmetric interval of 10% of the Tstart-Tend-interval surrounding Tpeak;

F6 Flatness parameter, F5, normalized by the size of the R wave;

F7 Flatness with Tpeak as mean evaluated in a symmetric interval of 20% of the Tstart-Tend-interval surrounding Tpeak;

F8 Flatness parameter, F7, normalized by the size of the R wave;

F9 Ratio of the total area under the T-wave from Tstart to Tpeak and the corresponding time interval;

F10 Flatness parameter, F9, normalized by the size of the R wave;

F11 Ratio of the total area under the T-wave from Tpeak to Tend and the corresponding time interval;

F12 Flatness parameter, F11, normalized by the size of the R wave;

F13 Ratio of the total area under the T-wave from Tstart to Tend and the corresponding time interval;

F14 Flatness parameter, F13, normalized by the size of the R wave;

F15 Ratio of the T wave height and the T wave width;

F16 The T wave height;

F17 Average slope from Tstart to Tpeak;

F18 Average slope from Tpeak to Tend;

F19 The Hill parameter, n, evaluated by least square fitting of the repolarization integral, RI(t), from the Jpoint to the following Ponset;

F20 The Hill parameter, n, evaluated by least square fitting of the repolarization integral, RI(t), from Tstart to Tend;

F21 The Hill parameter, V_{max}, evaluated by least square fitting of the repolarization integral, RI(t), from the Jpoint to the following Ponset; and

F22 The Hill parameter, V_{max}, evaluated by least square fitting of the repolarization integral, RI(t), from Tstart to Tend.

6. (Previously Presented) System according to claim 1, wherein the group of duration comprises at least one of the following parameters:

QTc The Q-T interval normalized by the square root of the R-R interval according to Bazett's formula;

D2 The time interval from Tstart to Tend;

D3 The time interval from Tstart to Tpeak; and

D4 The time interval from Tpeak to Tend.

7. (Previously Presented) System according to claim 1, wherein the group of complexity comprises at least one of the following parameters;

C1: Number of local maxima between Tstart and Tend; the minimum number is one; and

C2: Number of phases between Tstart and Tend, where a phase is defined as a singly connected part of the wave that is entirely above or entirely below the iso-electric line; the minimum number is one.

8. (Previously Presented) System according to claim 1, wherein the system is configured to select and combine parameters from the different groups.

9. (Previously Presented) System according to claim 1, wherein the system is configured to be trained during use, wherein the parameters' values are calculated for individual subjects, wherein the mathematical analysis of the parameters determines at least one optimal small parameter set out of the complete number of parameters from all categories.

10. (Previously Presented) System according to claim 1, wherein the final classification function is at least based on data from at least one LQT or drug influenced group and Normal subjects stored as a training set, with the consequences that the classification is improved by adding new subjects to the training set, wherein the new subject are tailored to demographic or gender differences.

11. (Previously Presented) Method for analyzing drug influence on ECG curvature having a number of parameters, the method comprising:

receiving ECG curvature from a source,

indicating a number of different parameters contained in the received ECG curvature,

storing the parameters in storage means,

selecting disease specific parameters in the storage means,

selecting parameters from groups of parameters including symmetry, flatness, duration and/or complexity,

combining selected parameters in mathematical analyzing means,

representing the result of the mathematical analysis as a point in at least one coordinate system having at least one axis,

comparing the actual placement in the coordinate system with a number of reference parameters stored in a memory, and

analyzing the QT curvature of the ECG for indicating drug induced changes.

12. (Previously Presented) Method according to claim 11, the method further comprising repeating the analyzing process for further selected parameters for achieving more reliable results.

13. (Currently Amended) Use of a system for analyzing ECG curvature for test of drugs,

wherein the system has input means connected to an ECG source, comprising the steps of:

~~wherein~~ isolating and storing at least one among a number of different parameters ~~is isolated and stored~~ in the system,

~~wherein~~ indicating and/or isolating the different parameters of a received ECG curvature ~~are indicated and/or isolated~~ for indicating possible symptoms,

~~wherein~~ combining a number of selected parameters[[,]] ~~are combined~~ in at least a first mathematical analysis, [[where]] and representing the result of the analysis ~~represented~~ as a point in at least one coordinate system, comprising at least one axis,

~~wherein~~ using the system to compare[[s]] the actual placement in the coordinate system with a number of reference parameters stored in the system, for indicating symptoms having influence on the ECG curvature,

~~wherein~~ calculating the parameters of the ECG curvature ~~are calculated~~ before and after a drug test for a number of subjects,

~~where~~ calculating the difference for selected parameters between before and after testing ~~are calculated~~ for each subject,

~~wherein~~ using the system to analyze[[s]] the QT curvature of the ECG for indicating acquired Long QT syndrome, and

~~wherein~~ providing a statistical analysis of selected parameters for a number of subjects that gives statistical significance for at least one of the following decisions:

"acceptance of the drug",

"rejection of the drug", and

"further testing of the drug".

14. (New) Use according to claim 13, wherein the input means connected to an ECG source is at a first location and the decisions are transmitted to a second location.

15. (New) Use according to claim 14, wherein the first location is in an ambulance on its way to a hospital and the second location is the hospital.

16. (New) System according to claim 1, wherein the input means and ECG source are at a first location and wherein the system is adapted to transmit an analysis output to a second location.

17. (New) Method according to claim 16, wherein the first location is in an ambulance and the second location is a hospital.